

DAV International School, Amritsar
Assignment of Chapter III

Subject – Biology

Class –IX

Topic – The Fundamental Unit of Life

Date -

1. Why are lysosomes called (a) Suicide bags of cell (b) Scavenger of cell
2. Name two cell organelles which have double membranous cover.
3. If you are provided with some vegetables to cook. You generally add salt into the vegetables during cooking process. After adding salt, vegetables release water. What mechanism is responsible for this define it?
4. Name the organelles which are
 - (a) Transporting channels of the cell
 - (b) Power house of cell
 - (c) Packaging and dispatching unit of the cell.
 - (d) Digestive bag of the cell
 - (e) Storage sacs of the cell
 - (f) Kitchen of the cell
 - (g) Control room of the cell
5. What are cell wall & cell membrane made up of?
6. Difference between Prokaryotic cell & Eukaryotic cell.
7. Why does a plant cell, when placed in a hypotonic solution, not burst?
8. Why chloroplasts are called kitchen of the cell?
9. Mitochondria & Plastids are semiautonomous organelles. Why?

CLASS - IX

ASSIGNMENT SHEET

Topic - Improvement
in food resources
Date -

Subject - Biology

- Q1 What is composite fish Culture ? Mention at least two advantages of Composite fish culture . Also mention one limitation of this system?
- Q2 Differentiate between aquaculture and Marie culture?
- Q3 How do pests generally attack the plants ?
- Q4 Name the two components of the cattle diet and give two examples each ?
- Q5 What are the advantages of check dams ?
- Q6 Mention some ways in which biotic and abiotic factors effect the stored grains ?
- Q7 What is fumigation. Give two examples of fumigants ?
- Q8 What is genetic engineering ? What are genetically modified crops ?
- Q9 Differentiate between Dug wells and tube wells ?
- Q10 Mention at least four qualities of a good animal shelter ?
- Q11 Mention at least four differences between mixed and inter cropping ?
- Q12 For good production of poultry birds, good management practices are important. Comment ?
- Q13 What is artificial Insemination ? Mention two advantages of this process ?
- Q14 What is hybridization ? Mention at least 4 factors for that can be improved by hybridization ?
- Q15 What is photoperiod ?

SUBJECT : Biology

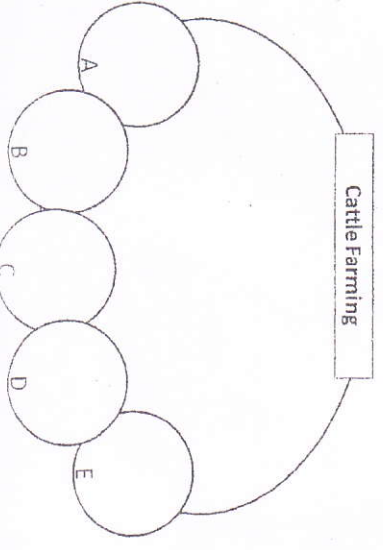
Topic - Improvement in food Resources

Instructions:

- Given below are outline structures of some 'Bead Necklaces' and a list of characters placed in different categories. Each necklace is given a name that is actually a 'term' important for Food Production. You have to pick one character from each category to list the features of a group. In this way, you will 'string the beads' and the necklace will be complete when all the beads have been allotted characters from each category.



Categories	A	B	C	D	E
	For Milk and Drought labour	Layers and broilers	Fowl	Dwarf parent preferred for commercial chick production	Mullets and Bheki
	For egg production and chicken meat	Marine and fresh water varieties	<i>Penaeus monodon</i>	Lactation period is important while selecting the right breed	Aseel and Leghorn
	Cheap source of animal protein obtained from water	Dairy and draught animals	<i>Apis dorsata</i> , <i>Apis mellifera</i>	Large schools are located in open sea using satellites and eco-sounders; Capture and culture methods are also used	Jersey, Red Sindhi
	For production Honey	Local and Italian variety	<i>Bos indicus</i> and <i>Bos bubalis</i>	Value or quality of product depends upon pasturage	Rock bee and little bee



Q1. 5 g of raisins were placed in distilled water for 24 hours. The mass of soaked raisins was found to be 7g. Calculate the percentage of water absorbed by raisins.

Q2. A student took x gram water in a beaker and dipped 5 gram raisins in it. After keeping raisins in water for about 2 hours he measured the mass of soaked raisins as y grams. He also measured the mass of water absorbed from the beaker which was z grams. on the basis of his observations, the %age of water absorbed by raisins would be :

Q3. If grapes are kept in concentrated sugar solution, which process will take place?

Q4. What is the mathematical equation used to determine the mass %age of water imbibed by raisins?

Q5. Three students A, B & C were given five raisins each of equal mass. The raisins were soaked in distilled water at room temperature. A soaked the raisins for 10 minutes, B for overnight and C for 60 minutes. Then they calculated the %age of water absorbed by raisins.

Ans. Now Answer the following questions:-

- ① Name the student whose raisins will show the maximum %age of water absorbed.
- ② Name the student whose raisins will show the minimum %age of water absorbed.

Q6. An experiment was set up to determine the %age of water absorbed by raisins. If the mass of dry raisins was 40g, & mass of wet raisins was 45g, the percentage would be

(A) $\frac{45g}{40g} \times 100$

(B) $\frac{40g}{45g} \times 100$

(C) $\frac{(45-40)g}{40g} \times 100$

(D) $\frac{(45-40)g}{45g} \times 100$

Q7. Following five steps are generally followed in the experiment determining the %age of water absorbed by raisins. How then steps are not in proper sequence

(i) Measure the mass of dry raisins

(ii) Measure the mass of soaked raisins

(iii) Take a clean beaker & put dry raisins in it

(iv) Pour water into the beakers so that the raisins are dipped in it

(v) After about 90 minutes remove soaked raisins from the beaker & wipe them with filter paper.

The correct sequence of these steps is

(a) 1, 2, 3, 5, 4

(b) 1, 3, 4, 5, 2

(c) 3, 1, 4, 5, 2

(d) 3, 1, 5, 4, 2

Q8. At the end of experiment, to determine the %age of water absorbed by raisins, the raisins are wiped just before weighing. This is to ensure that

(a) hands do not get wet

(b) the raisins lose water before weighing

(c) the weighing scale does not get wet

(d) only water absorbed by raisins is weighed.

Paper-Pen Test Questions for Formative/Summative Assessment

Very Short Answer (VSA) Type or Oral/Quiz Questions

(One Mark)

1. Define a tissue.
2. Name the components of xylem.
3. What is the function of a tendon?
4. What is a neuron?
5. What are the constituents of phloem?
6. Mention two characteristics of cardiac muscles.
7. Water hyacinth float on water surface. Why?
8. Which structure protects the plant body against the invasion of parasites?
9. Why are xylem and phloem called complex tissues?
10. What do you mean by meristems?

Short Answer Type-1 (SA-1) Questions

(Two Marks)

1. Name the tissue found
 - (a) at the bases of leaves.
 - (b) at the growing tips of the root and stem.
 - (c) in the lining of the wind pipe.
2. What is the basic difference between meristematic tissue and permanent tissue?
3. What are the differences between parenchyma and collenchyma tissues?
4. What are platelets? What do they do?
5. Animals of colder regions and fishes of cold water have thicker layer of subcutaneous fat. Describe why.
6. Name the different components of xylem and draw a living component.
7. Differentiate between voluntary and involuntary muscles. Give one example of each type.
8. Why is epidermis important for the plants?
9. Write two major functions of sclerenchyma tissue.
10. Write two major functions of blood occurring in our blood.

Short Answer Type-II (SA-II) Questions

(Three Marks)

1. Name one place in a living organism where the following tissues are located:

(a) Squamous epithelium	(b) Columnar epithelium
(c) Areolar connective tissue	(d) Adipose tissue
(e) Cardiac muscle	(f) Meristematic tissue
2. Explain the roles of apical, lateral and intercalary meristems.
3. Describe the different parts of a neuron with a suitable diagram.
4. (a) Differentiate between meristematic and permanent tissues in plants.
(b) Define the process of differentiation.
(c) Name any two simple and two complex permanent tissues in plants.
5. Name three types of simple permanent tissues in plants. Also write major characteristics and functions of each of them.
6. Draw and describe the xylem elements along with the functions of each of them.
7. Differentiate between blood and lymph. Also write major functions of each of them.

Long Answer (LA) Type Questions

(Five Marks)

1. Describe various types of epithelial tissues. Also draw their diagrams.
2. Describe the structure and functions of adipose tissues.
3. Name and differentiate various components of mammalian human blood.
4. Classify the different types of animal tissues in tabular form. Describe any one of them in detail.
5. Describe the structure and function of different types of epithelial tissues. Draw diagram of each type of epithelial tissue.
6. Draw well labelled diagrams of various types of muscles found in human body. Also write the characteristic features of each of them.